

REMARKS

Entry of the amendment is respectfully requested since it addresses issues raised for the first time in the Final Office Action and would lessen the issues on appeal. Reconsideration is respectfully requested in light of the remarks that follow.

Upon entry of the amendment, claims 2, 3 and 5-13 are before the Examiner. Claims 4 and 14 are canceled. Claims 2, 3, 5 and 6 have been amended. Claim 2 has been deleted to remove "and capable of arrangement in multiple rows" and to clearly indicate the presence of one-piece design- the crimp edge and the form contour in the region of the hollow bottom- to form the "sealed" legs of the container. Claim 3 has been amended to be in independent form. Claim 3, as amended, focuses on the presence of one-piece design- the crimp edge and the form contour in the region of the hollow bottom- to form the "sealed" legs of the container. It does not recite the water cooling means requires by claim 2. Claim 5 includes the subject matter of cancelled claim 4 and as amended, depends directly on claim 2. Claim 6 has been amended so that it more nearly corresponds to original claim 6. Claim 14 included the subject matter of original claim 6 and should not have been deemed to contain new matter. Claim 1 was withdrawn from consideration by the Examiner pursuant Rule 142(b) as directed to a non-elected invention. The election was without traverse.

Claims 2-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse.

The language identified by the Examiner as new matter has been deleted. This was done solely to advance prosecution. The elements of the claimed tool operate principally in an axial direction to form the container. In contrast, the elements of the UK Patent (2,079,668) molding tool are required to operate in both an axial and traverse direction which transverse acting elements mitigate against the arrangement of the UK Patent (2,079,668) molding tool in multiple rows resides. Accordingly, Applicants urge that the capable of arrangement in multiple rows has implicit support. Also note that the canceled phrase appears in paragraph 12 of the specification, although, in the context of the disclosed method, which method can be performed on the claimed

(09/986,755)

apparatus. The subject matter of claim 14 is based on original claim 6 and should not have been considered new matter. The Examiner's concerns appear based on his reading of the claim.

In any event, the claim or the subject matter has been cancelled. Withdrawal of the rejection is respectfully requested.

Claims 2-10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over UK Patent (2,079,668) in view of Merklinghaus et al. (4,932,856). Applicants respectfully traverse.

It is respectfully requested that the Examiner reconsider his position. It is submitted that the instant claim tool reflects a design not suggested by the references alone or in combination. The instant arrangement of elements permits the container to be formed by axial displaced elements. See figure 3 for example. Note the movement direction of elements 32 and 35. Element 33 forms the base. Also consider the cooperative interaction between elements 35 and 30 to form the "sealed" legs 31 of the container. A circumferentially closed crush edge forms the solid support leg. In contrast, the "crush edge" of UK Patent (2,079,668) consists of two parts. In order to remove the formed container from the mold, those two parts are moved apart. The UK Patent (2,079,668) tool relies on both axial acting element 52 to assist in forming the base and in transverse acting elements 40 and 40a to form the "sealed" legs 20. Consider the required actions suggested by figures 4-6 of UK Patent (2,079,668). This prevents a multi-row design of the forming tool. The molding tools of the UK Patent (2,079,668) and the claimed invention clearly operate in distinct manners.

In addition, the placement of water cooling means in the manner claimed allows the claimed molding tool to operate at a higher cycle number rates without a loss in product quality. The overall design also minimizes part wear and tear due to the fewer modes of action required. Operational lifetime of the molding tool is increased.

The deficiencies noted above are not remedied by Merklinghaus et al. (4,932,856). While Merklinghaus et al. (4,932,856) do mention water cooling, the reference does not suggest deficiencies in the design of the Merklinghaus et al. (4,932,856) nor does it teach the claimed axial element design which simplifies the formation of the container base and "sealed" legs.

(09/986,755)

The claimed tool comprises an upper mold part (10) with compressed-air feed, a lower mold part (11) with at least one cutting die (22) (the shape of the die corresponds to the shape of the container (9) to be produced, provided around the circumference with a one-piece, static crimp edge (31), a displaceable mold bottom (33) and a sealing dome (35) that surrounds the bottom. The sealing dome (35) cooperates with the one-piece, static crimp edge (31) to form the base and crimped edge. The sealing dome is operatively connected to a drive (51) for its displacement relative to the mold bottom (33).

As noted above the UK Patent forms the base and the crimp edge by employing a multi-part, as a rule two-part, design and are displaced radial to the shaping die axis for mold removal purposes. The tool according to UK patent can only be embodied as a single-row tool. It employs structural components 40 provided with drives 42, orthogonal to the movement direction of the break-down die 60, which extend far enough in this direction to prevent the adding of several container rows in the plastic foil throughput direction. The UK patent has movable parts (40, 54) for realizing the molding and removal from the mold which parts move in flat guides one above the other. Flat guides have a tendency to jam, particularly if they move one above the other. In addition, they must be lubricated for maintaining their function. If lubricant ends up on the formed containers, these are not usable.

The claimed molding tool does not have transverse acting moving parts for creating the form contour of the hollow bottom. The claimed molding tool employs a static, one-piece design- the crimp edge and the form contour in the region of the hollow bottom to form the “sealed” legs. Accordingly, is not susceptible to problems and does not require maintenance like that required by the UK patent molding tool.

The sliding pieces (40) and the locking slider (54) in the cited reference move with every cycle and are therefore subject to wear and tear. The movement requires time, which has a negative effect on the clocking time, meaning the cycle number is reduced.

The piston (44) of claim 5 can be displaced inside a bore (47). UK patent does not show this. The ejection plate (45) of claim 6 is attached to all rods (32) is not disclosed by the UK Patent. Claim 7 describes an embodiment where all rods (32) are rigidly connected to a support plate (52). This causes movement relative to the ejection plate (45), also not shown in the UK

(09/986,755)

Patent. Claim 8 describes a piston (53) connected to the support plate which moves inside bore (54) of the cap (55), also not shown. Claim 9 describes molding parts comprising a cutting die (39) with cutting edge (40) and a molding insert (56) with crimp edge (31). This is also not shown.

In summary, the teachings of the UK Patent are incomplete and not suggestive of the claimed molding too design, requiring only axial motion to formed the container base and “sealed “legs. The secondary reference is not suggestive of this arrangement. Basing the rejection on obviousness, doe not remedy the deficiencies of the primary reference. There is no suggestive teaching. Withdrawal of the rejection is respectfully requested since a proper prima-facie case has not been established.

Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the UK patent ('668) in view of Merklingshaus et al ('856) as applied to claims 2-10, 12 and 14 above and further in view of Yaita et al. (4,758,394). Applicants respectfully traverse.

Yaita et al. has been considered. The teachings provided therein do not remedy the deficiencies noted above.

Further, while Yaita et al. do mention stainless steel amongst a myriad of other possible metals and alloys. There is no reason apparent form the Office Action as to why one would be motivated to select a stainless steel, an alloy. Further, not all stainless steels can be hardened by heat treatment. Accordingly, it is not clear that Yaita et al. inherently teach a harden steel as a possibility.

Withdrawal of the rejection is respectfully requested.

In view of the foregoing amendments and remarks, the application is believed to be in condition for allowance and a notice to that effect is respectfully requested.

(09/986,755)

Should the Examiner not find the Application to be in allowable condition or believe that a conference would be of value in expediting the prosecution of the Application, Applicants request that the Examiner telephone undersigned Counsel to discuss the case and afford Applicants an opportunity to submit any Supplemental Amendment that might advance prosecution and place the Application in allowable condition.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. G. Wiseman', written over a horizontal line.

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